

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number
WO 2004/057573 A1

Ref.

(51) International Patent Classification⁷: **G10L 15/16**

(21) International Application Number:

PCT/EP2002/014718

(22) International Filing Date:

23 December 2002 (23.12.2002)

(25) Filing Language:

English

(26) Publication Language:

English

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EL, ES, H, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

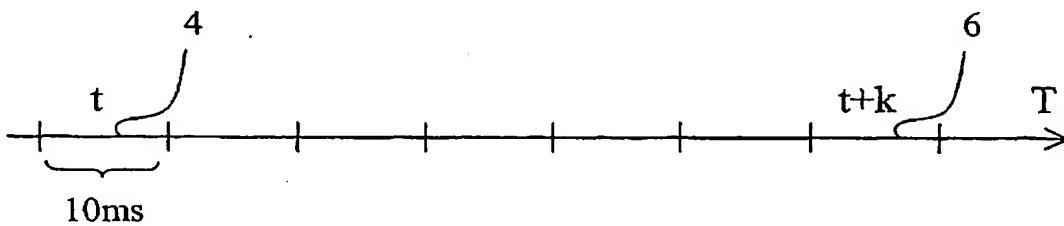
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CL, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF OPTIMISING THE EXECUTION OF A NEURAL NETWORK IN A SPEECH RECOGNITION SYSTEM THROUGH CONDITIONALLY SKIPPING A VARIABLE NUMBER OF FRAMES



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(57) Abstract: A method of optimising the execution of a neural network in a speech recognition system provides for conditionally skipping a variable number of frames, depending on a distance computed between output probabilities, or likelihoods, of a neural network. The distance is initially evaluated between two frames at times t and t+k, where k is a predetermined maximum distance between frames, and if such distance is sufficiently small, the frames comprised between times t and t+k are calculated by interpolation, avoiding further executions of the neural network. If, on the contrary, such distance is not small enough, it means that the outputs of the network are changing quickly, and it is not possible to skip too much frames. In that case the method attempts to skip less frames, calculating and evaluating a new distance.